



TAIT ENVIRONMENTAL MANAGEMENT

Fax Cover Sheet

Offices: Orange • San Diego • Sacramento • Concord • Phoenix, AZ • Tucson, AZ

DATE: 12/17, 1996TO: MDRCFAX No: (310)627-3109ATTN: Mr. Merle PautschFROM: Marc RaviSUBJECT: Well Abandonment

JOB No: _____

Transmitting 7 pages, including cover memo.

Comments: Enclosed is a draft copy of the
well abandonment proposal. Following your
review give us a call so we may discuss
the details / specific well construction and
or cost break-down. The conditions of services
have not been included. I am sure you
will have some questions concerning the proposal

Thanks
Marc

If this transmission appears incomplete or incorrect, please notify our office immediately. Thank you.

1100 Town & Country Road / Suite 1200 / Orange, CA 92668 / (714) 560-8200 / (714) 560-8211 FAX



TAIT ENVIRONMENTAL MANAGEMENT, INC.

December 17, 1996

DRAFT

Mr. S. Mario Stavale
McDonnell Douglas Realty Company
4060 Lakewood Boulevard, 6th Floor
Long Beach, California 90808

**SUBJECT: PROPOSAL TO ABANDON TWO (2) WATER WELLS AT THE
MCDONNELL DOUGLAS REALTY COMPANY HARBOR GATEWAY
PARCEL LOCATED IN LOS ANGELES, CALIFORNIA**

Dear Mr. Stavale:

Tait Environmental Management, Inc. (TEM), is pleased to present this proposal to abandon two (2) municipal water wells at the McDonnell Douglas Realty Company (MDRC) Harbor Gateway parcel located in Los Angeles, California. This budgetary cost estimate has been prepared following your verbal request.

OBJECTIVE

The objective of the proposed scope of work is as follows:

- Properly abandon the municipal water wells in accordance with the California Department of Water Resources, Water Well Standards, Bulletin 74-81 and Bulletin 74-90.

SCOPE OF WORK

The scope of work TEM has developed is described in the following tasks:

Task 1. Health and Safety Plan

Prior to the abandonment activities, TEM will prepare a health and safety plan (HSP) for the proposed scope of work. The HSP is designed to minimize exposure of TEM personnel and its subcontractors to potentially hazardous materials. The HSP describes the properties of contaminants that may be encountered, personal protective equipment, working area monitoring, and contingencies in the event of an emergency. The HSP will be implemented in the field by the Site Safety Officer.

**MDRC Harbor Gateway Parcel
Well Abandonment Proposal**

December 17, 1996

Task 2. Underground Clearance, Permitting and Agency Notification

Underground Service Alert will be notified for the demarcation of the on- and off-site underground utilities. Existing utilities will be "cleared" prior to the initiation of site excavation activities. In addition, the South Coast Air Quality Management District (SCAQMD) will be notified in accordance with Rule 1166 requirements.

All required permits will be obtained by MDRC from the State, County and City Departments. If requested, TEM can assist MDRC in permitting.

Task 3. Well Abandonment

The wells are constructed of 8-inch steel to depths of approximately 500 feet deep. Each well is perforated from 50 to 500 feet below ground surface. It is TEM's understanding that the demolition contractor will remove all above-ground structures and pumps prior to well abandonment activities.

Bentonite grout will be inserted and high pressure air will be used to force bentonite grout through the perforations to seal each well. A backhoe will be used to expose the upper 5 feet of each well, which will be cut off and sealed with concrete. The sealed wells will be back-filled and compacted to match the surrounding area. Any waste generated during the abandonment activities will be the responsibility of MDRC.

Task 4. Letter Report

Upon completion of the well abandonment activities, TEM will prepare a letter report which will summarize the work performed and the procedures used. The report will be submitted to MDRC in a draft format for review prior to agency submittal.

Task 5. Project Management

TEM will coordinate of each of the tasks listed above, client and agency communications, and overall project management.

ESTIMATED BUDGET

Work will be conducted on a time-and-materials basis per our Schedule of Fees for work conducted in the 1996/1997 calendar year. The estimated budget for the scope of work

**MDRC Harbor Gateway Parcel
Well Abandonment Proposal****December 17, 1996**

described is presented in Table 1. In addition, additional cost estimates for 10-inch, 12-inch and 14-inch casing can be provided upon request.

SCHEDULE

Work may commence upon your written approval of this budgetary cost estimate. Field activities are anticipated to be completed in approximately three (3) days. A letter report will be submitted approximately three (3) to five (5) weeks after the completion of all field activities.

CLOSURE

TEM appreciates the opportunity to be of service to MDRC. Should you have any questions regarding this proposal, please contact either of the undersigned at your convenience.

Very truly yours,

TAIT ENVIRONMENTAL MANAGEMENT, INC.

Marc A. McWilliams
Project Geologist

Ravi S. Limaye, P.E., R.E.A.
Vice President

Attachments: Table 1 - Estimated Budget - Well Abandonment (8-inch wells)
West Hazmat Quote
Lyne - Western Quote
Fee Schedule

Accepted By:

McDonnell Douglas Realty Company

Date

g:\marc\proposal\mdrcwell.prp

TABLE 1
ESTIMATED BUDGET
WELL ABANDONMENT (8-INCH WELLS)

MDRC HARBOR GATEWAY PARCEL
LOS ANGELES, CALIFORNIA

TASK DESCRIPTION		ESTIMATED COST
Task 1:	Health and Safety Plan	\$250
Task 2:	Underground Clearance and Agency Notification - SCAQMD/Dig Alert Notifications	\$250
Task 3:	Well Abandonment (Based on 2 Days) Driller - \$10,500 + 15% TEM Labor - 2 days @ \$900/day Backhoe - \$500	\$15,275
Task 4:	Letter Report	\$1,500
Task 5:	Project Management	\$400
TOTAL ESTIMATED BUDGET		\$17,675





**WEST HAZMAT
DRILLING CORP.**
An Interwest Company

1016 East Katella Avenue
Anaheim, California 92805
(714) 939-6850
FAX (714) 939-6759

December 09, 1996

Proposal No.: 126018

Mr. Mark McWilliams
TAIT ENVIRONMENTAL
(714) 560-8200 / 8211 fax

Dear Mr. McWilliams:

West Hazmat Drilling Corp. is pleased to submit this proposal for drilling in Los Angeles. This proposal is based on the information from our telephone conversation and is valid for 60 days.

• Drill Out and Pressure Abandon * 2-500' 8" Wells	9.00/Ft.
• Additional Cement Slurry	Cost + 15%
• Mob/Demob	1500.00
• Standby	325.00/Hr.
• 55 Gallon 17h Drums	36.00/Ea.
• Level C	15.00/Hr./Man
• Estimated Project Cost	\$10,500.00

*Price includes 1 Perf/Ft (one pass)

Your firm shall be responsible for: 1. Obtaining any site specific permits; 2. Locating and clearly marking any underground installations or utilities; 3. Obtaining access to the site for a normal truck mounted drill rig with no overhead wires within 20 feet of the holes. West Hazmat shall not be responsible for any damages to underground improvements not clearly and accurately marked.

If bedrock, cobbles, flowing sands, or other adverse drilling conditions are encountered, drilling will be continued on a time and materials basis or terminated at the discretion of West Hazmat. Any scheduled job canceled without a 24 hour notice is subject to a 4 hour minimum charge.

We look forward to working with you. Please call if any of the information is incorrect or if you have any questions.

Sincerely,
West Hazmat Drilling Corp.

William A. Poupis
Vice President

Layne - Western

13285 CENTRAL AVE
CHINO, CA 91710
PHONE: 909 - 627 - 1521
FAX: 909 - 628 - 1233

Preliminary Cover Sheet

To: Mark Mc Williams
Company: Tait Environmental
Phone: 714 - 560 - 8200
Fax: 714 - 560 - 8211

From: Dave Hines
Company: Layne - Western Co.
Phone: 909 - 627 - 1521
Fax: 909 - 628 - 1233

Date: 11/21/96
Pages including
this cover page: 1

Comments:

Mark, the cost for abandonment of two wells (8" x 500') in Torrance is as follows.

1. Mobilization/demobilization.....	\$ 1,250.00
2. Perforating (1 hole per foot).....	\$ 4,260.00
3. Abandonment with 10 sack cement/sand slurry.....	\$ <u>5,640.00</u>
Total.....	\$ 11,150.00

Excavation and backfill around wellheads by Tait Environmental.

The above pricing is subject to verification of jobsite conditions.

Thank you,

Dave Hines
Dave Hines